

BUILDING PERMITS SURVEY DOCUMENTATION - STATE PRINTOUTS

United States, Region, Division, and State Estimates for Permit Authorized Construction - Computer Printouts

Introduction

Beginning with Annual 1995 and January 1996 this file provides building permit statistics on new privately-owned residential construction. For the years 1980-1994 and the months from January 1988 through December 1995, this file provides building permit statistics on new residential and nonresidential construction; additions, alterations and conversions; and demolitions. These are provided for the 50 states and the District of Columbia sorted by division and region, followed by aggregate totals for divisions, regions and the United States total. It also provides statistics for inside and outside metropolitan statistical areas (MSAs). Data for Puerto Rico and the Virgin Islands are not included in the United States totals. Beginning with January 1998 and annual 1997 tallies, States are shown alphabetically with Division, Region, and US totals at the end of the tally. Prior to this format, the states were printed in order of Region and Division.

Tabulation Format

A. The monthly tabulation provides:

1. Survey month,
2. State name and two-digit FIPS code,
3. Two major sets of data for each type of construction (see "Description of Data Items"):
 - a. Estimates with Imputation - includes reported data for monthly respondents and imputed data for nonrespondents, and
 - b. Reported Only - includes only reported data for respondents
4. Each major set of data (Estimates with Imputation and Reported Only) has two subsets:
 - a. Current month - data tabulated for only that survey period, and
 - b. Year-to-Date - summed data from the beginning of the year through the current survey month including late reports and corrections.

B. The annual tabulation provides:

1. Survey year,
2. State name and two-digit FIPS code,
3. Two major sets of data for each type of construction (see "Description of Data Items"):
 - a. Estimates with Imputation - includes reported data for monthly and annual respondents and imputed data for monthly and annual nonrespondents, and
 - b. Reported Only - includes only reported data for monthly and annual respondents.

Source of Data

Statistics on construction authorized by building permits are based upon reports submitted by local building permit officials in response to a mail survey. They are obtained using Form C-404, "Report of Building or Zoning Permits Issued and Local Public Construction." When a report is not received, missing residential data are either (1) obtained from the Survey of Use of Permits (SUP) or (2) imputed. All other missing data are imputed. The SUP is used to collect information on housing starts. Data from the SUP are available only for about 850 places for which Census Bureau interviewers list and sample the permits that authorized construction of new residential structures. For places not in the SUP, imputations are used. The imputations are based on the assumption that the ratio of current month authorizations to those of a year ago should be the same for both respondents and nonrespondents. When imputing annual statistics, the ratio is based on current year authorizations to those of a year ago.

Monthly Building Permits Statistics

The monthly statistics are based on data from a sample of 8,500 permit-issuing places, selected from a universe of approximately 19,000 places. All places in 99 designated metropolitan statistical areas (MSAs) and primary metropolitan statistical areas (PMSAs) were selected with certainty. The remaining places were stratified by state into two strata based on the number of housing units authorized in 1989, 1990, 1991, and 1992. In each state, all places that authorized housing units during that period greater than or equal to a predetermined number of units were selected with certainty. The other places were selected at the rate of 1 in 10.

Annual Building Permits Statistics

The annual statistics are not based upon a sample, but are obtained by directly cumulating the data for the 19,000 permit-issuing places. Although these statistics are not subject to sampling variability, they are subject to various response and operational errors which can be attributed to

many sources: inability to obtain information about all cases, differences in interpretation of questions, inability or unwillingness of respondents to provide correct information, and errors made in processing the data. Explicit measures of the effects of these errors are not available. However, most of the important operational errors were detected and corrected in the course of the Bureau's review of the data for reasonableness and consistency.

Sampling Variability

The monthly estimates are based on samples and may differ from statistics which would have been obtained from a complete census using the same survey questionnaire and procedures. An estimate based on a sample survey is subject to both sampling error and nonsampling error. The accuracy of a survey result is determined by the joint effect of these errors. Sampling error reflects the fact that only a particular sample was surveyed rather than the entire population. Estimates of size of the sampling errors are provided by the standard error of the estimates. Nonsampling errors can be attributed to many sources: inability to obtain information about all cases in the sample; definitional difficulties; differences in interpretation of questions; inability or unwillingness of respondents to provide correct information; and errors made in processing data. As derived for this report, the estimated relative standard errors include part of the effect of nonsampling errors but do not measure any systematic biases in the data.

The particular sample selected for the Building Permits Survey is one of a large number of similar probability samples that, by chance, might have been selected using the same sample design. Each of the possible samples would probably yield somewhat different results. The standard error of a survey estimate is a measure of the variation of all possible sample estimates around the theoretical, complete coverage value. The relative standard error is defined as the standard error divided by the value being estimated.

Geographic Coverage of Building Permit Jurisdiction

Most of the permit-issuing jurisdictions are municipalities; the remainder are counties, townships, or unincorporated towns. For the municipalities, and townships or towns, the area subject to building permit requirements to which the figures pertain is normally that of the governmental jurisdictions. A small number of municipalities have authority to issue building or zoning permits for areas extending beyond their corporate limits. In such cases, the data relate to the entire area within which the permit-issuing authority is exercised. Similarly, a small number of townships issue permits for only a part of the township and the data normally covers only the area subject to the township's permit system.

Limitations of Data

The portion of construction measurable from building permit records is inherently limited since such records obviously do not reflect construction activity outside of the area subject to local

permit requirements. For the nation as a whole, less than 5 percent of all privately owned housing units built are constructed in areas that do not require building permits.

The reported statistics are also influenced by the following factors:

1. Some building permit jurisdictions close their books a few days before the end of the month/year, so that the time reference for permits is not, in all cases, strictly the calendar month/year.
2. A study spanning 4 years showed that about 3 percent of the single-family houses built in permit-issuing places are built without a permit.

To the extent that most of these limiting factors apply rather consistently over an extended period, they may not seriously impair the usefulness of building permit statistics as prompt indicators of trends in residential construction activity.

Questions should be directed to Manufacturing and Construction Division,
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